

I claim:

1. A method for applying paints or varnishes with the aid of an application device in order to apply a color design on surfaces of buildings or public or civil engineering works according to a previously executed implementation of a digital image model into a digital object, which represents the real surface of the object, comprising the steps of

moving the application device on the surface while maintaining in contact with the surface,

continuously measuring the position of the application device by a positioning system or additional motion sensors,

applying paint in accordance with said implementation depending on the position measured,

stopping the application of paint automatically, if the position cannot be determined sufficiently accurate with respect to a predetermined position error acceptance threshold or if paint has already been fully applied at the positions of the paint applying elements.

2. The method according to claim 1, wherein the application device is maintained in contact with the surface by manually pressing it onto the surface or by applying a vacuum between the application device and the surface.

3. The method according to claim 1, wherein the positioning system is based on position measurement methods, which use fix entities in relation to the surface, to measure position information relative to, in particular by applying the methods of distance measurement, angular measurement, telemetry, photometrics or imaging measurement principles.

4. The method according to claim 1, wherein a positioning method is used, which utilizes optoelectronic means to identify position relevant characteristics of the surface in the near range of the application device.

5. The method according to claim 1, wherein motions of the application device are measured to derive position information thereof from, in particular velocity and/or rotational velocity and/or acceleration and/or rotational acceleration.

6. The method according to claim 1, wherein additionally the tilt of the application device within the earth gravity field and/or the orientation of the application device in relation to the earths magnetic field is measured and used for the position measurement.

7. The method according to claim 1, wherein the surface object is recorded by at least one method as described in one of the claims 3 to 6.

8. The method according to claim 1, wherein the distance between the paint applying elements and the surface of the object is adjustable.
9. The method according to claim 1, wherein the application device is moved manually.
10. The method according to claim 1, wherein the application device is moved semi-automatically.
11. The method according to claim 1, wherein the application device is moved automatically.
12. The method according to claim 1, wherein the application device comprises at least one nozzle element, in particular a spraying element.
13. The method according to claim 1, wherein the application device comprises a row or an array of spraying elements.
14. A device according to one of the preceding claims, comprising
  - a movable application device for applying paints and varnishes,
  - a position measurement means with respect to said device,
  - a movement measurement means with respect to said device,
  - means to adjust the distance between the paint applying device and the surface of the object when brought into contact.